

IN THE CLAIMS

Please cancel claims 1-59.

1 - 59. (Canceled)

60.(Original) A method of forming a semiconductor structure, the method comprising:
forming a first conductive layer;
forming an insulation layer abutting the first conductive layer;
forming a second conductive layer abutting the insulation layer; and
forming an inhibiting layer abutting the second conductive layer, wherein the inhibiting layer inhibits formation of an undesired oxidation compound so as to enhance an ohmic contact.

61.(Original) The method of claim 60, wherein forming the inhibiting layer includes forming the inhibiting layer on the second conductive layer.

62.(Original) The method of claim 60, wherein forming the inhibiting layer includes embedding the inhibiting layer in the second conductive layer.

63.(Original) The method of claim 60, wherein the method does not proceed in the order presented.

64.(Original) The method of claim 60, wherein forming the first conductive layer includes forming the first conductive layer from at least one conductive metal oxide.

65.(Original) The method of claim 64, wherein forming the first conductive layer includes forming the first conductive layer from the at least one conductive metal that is selected from a group consisting of ruthenium oxide and iridium oxide.

- 66.(Original) A method of forming a semiconductor structure, the method comprising:
- forming a first conductive layer, wherein forming the first conductive layer includes forming the first conductive layer from at least one conductive metal oxide, wherein the at least one conductive metal oxide is selected from a group consisting of ruthenium oxide and iridium oxide;
 - forming an insulation layer abutting the first conductive layer, wherein the insulation layer includes at least one insulator metal oxide;
 - forming a second conductive layer abutting the insulation layer; and
 - forming an inhibiting layer abutting the second conductive layer, wherein the inhibiting layer inhibits formation of an undesired oxidation compound so as to enhance an ohmic contact.
- 67.(Original) The method of claim 66, wherein forming the insulation layer includes forming from the at least one insulator metal oxide that includes ditantalum pentaoxide.
- 68.(Original) The method of claim 66, wherein forming the second conductive layer includes forming from at least one conductive metal oxide.
- 69.(Original) The method of claim 68, wherein forming the second conductive layer includes forming from the at least one conductive metal oxide that is selected from a group consisting of ruthenium oxide and iridium oxide.
- 70.(Original) The method of claim 66, wherein forming the inhibiting layer includes forming the inhibiting layer from a substance selected from a group consisting of a transition metal, a transition metal alloy, a nitride compound, a noble metal, and a noble metal alloy.
- 71.(Original) The method of claim 70, wherein forming the inhibiting layer includes forming from the transition metal that is selected from a group consisting of platinum, rhodium, and tungsten.

72.(Original) The method of claim 70, wherein forming the inhibiting layer includes forming from the transition metal alloy that includes a platinum rhodium alloy.

73.(Original) The method of claim 70, wherein forming the inhibiting layer includes forming from the nitride compound that is selected from a group consisting of tungsten nitride and titanium nitride.

74.(Original) A method of forming a semiconductor structure, the method comprising:

forming a first conductive layer, wherein the first conductive layer comprises at least one conductive metal oxide, wherein the at least one conductive metal oxide is selected from a group consisting of ruthenium oxide and iridium oxide;

forming an insulation layer abutting the first conductive layer, wherein the insulation layer comprises at least one insulator metal oxide, wherein the at least one insulator metal oxide includes ditantalum pentaoxide;

forming a second conductive layer abutting the insulation layer, wherein the second conductive layer comprises at least one conductive metal oxide, wherein the at least one conductive metal oxide is selected from a group consisting of ruthenium oxide and iridium oxide; and

forming an inhibiting layer abutting the second conductive layer, wherein the inhibiting layer comprises a substance selected from a group consisting of a transition metal, a transition metal alloy, a nitride compound, a noble metal, and a noble metal alloy, wherein the transition metal alloy includes a platinum rhodium alloy, wherein the transition metal is selected from a group consisting of platinum, rhodium, and tungsten, and wherein the nitride compound is selected from a group consisting of tungsten nitride and titanium nitride, wherein the noble metal is selected from a group consisting of platinum, gold, titanium, and silver, and wherein the noble metal alloy is selected from a group consisting of graphite, chlorimet 3, and hastelloy C.

75.(Original) The method of claim 74, further comprising forming a diffusion barrier abutting to the second conductive layer.

76.(Original) The method of claim 75, wherein forming a diffusion barrier includes forming from a group selected from a nitride compound, a carbide compound, a boride compound, a transition metal alloy, and a transition metal nitride compound alloy.

77.(Original) The method of claim 76, wherein forming the diffusion barrier includes forming from the nitride compound that includes titanium nitride.

78.(Original) The method of claim 76, wherein forming the diffusion barrier includes forming from the transition metal alloy that includes titanium tungsten.

79.(Original) The method of claim 76, wherein forming the diffusion barrier includes forming from the transition metal nitride compound alloy that includes titanium nitride tungsten.

80.(Original) A method of forming a semiconductor structure, the method comprising:

forming a first conductive layer, wherein the first conductive layer comprises at least one conductive metal oxide, wherein the at least one conductive metal oxide is selected from a group consisting of ruthenium oxide and iridium oxide;

forming an insulation layer abutting the first conductive layer, wherein the insulation layer comprises at least one insulator metal oxide, wherein the at least one insulator metal oxide includes ditantalum pentaoxide;

forming a second conductive layer abutting the insulation layer, wherein the second conductive layer comprises at least one conductive metal oxide, wherein the at least one conductive metal oxide is selected from a group consisting of ruthenium oxide and iridium oxide;

forming an inhibiting layer abutting the second conductive layer, wherein the inhibiting layer comprises a substance selected from a group consisting of a transition metal, a transition metal alloy, a nitride compound, a noble metal, and a noble metal alloy, wherein the transition metal alloy includes a platinum rhodium alloy, wherein the transition metal is selected from a group consisting of platinum, rhodium, and tungsten, and wherein the nitride compound is

selected from a group consisting of tungsten nitride and titanium nitride, wherein the noble metal is selected from a group consisting of platinum, gold, titanium, and silver, and wherein the noble metal alloy is selected from a group consisting of graphite, chlorimet 3, and hastelloy C; and

forming a metallization layer abutting the inhibiting layer, wherein the metallization layer comprises a representative metal, and wherein forming the metallization layer further includes;

forming a diffusion barrier abutting the first conductive layer, wherein the diffusion barrier comprises a nitride compound, a carbide compound, a boride compound, a transition metal alloy, and a transition metal nitride compound alloy, wherein the nitride compound includes titanium nitride, wherein the transition metal alloy includes titanium tungsten, wherein the transition metal nitride compound alloy includes titanium nitride tungsten.

81.(Original) The method of claim 80, wherein forming a metallization layer includes forming from the representative metal that includes aluminum.

82.(Original) The method of claim 80, further comprising forming a silicide contact on a substrate.

83.(Original) The method of claim 82, wherein the method proceeds in the order presented.

84.(Original) The method of claim 80, further comprising:

forming an ohmic contact on a region of a substrate, wherein forming the ohmic contact includes forming the ohmic contact using a technique selected from a group consisting of doping the region of the substrate and forming a refractory metal silicide in the region of the substrate.

85.(Original) A method of forming a semiconductor structure, the method comprising:

forming an ohmic contact on a region of a substrate;

forming a first conductive layer, wherein the first conductive layer comprises at least one conductive metal oxide, wherein the at least one conductive metal oxide is selected from a group

consisting of ruthenium oxide and iridium oxide;

forming a first insulation layer abutting the first conductive layer, wherein the first insulation layer comprises at least one insulator metal oxide, wherein the at least one insulator metal oxide includes ditantalum pentaoxide;

forming a second conductive layer abutting the first insulation layer, wherein the second conductive layer comprises at least one conductive metal oxide, wherein the at least one conductive metal oxide is selected from a group consisting of ruthenium oxide and iridium oxide;

forming an inhibiting layer abutting the second conductive layer, wherein forming the inhibiting layer includes forming the inhibiting layer that includes the execution of a vapor deposition technique, wherein the vapor deposition technique is selected from a group consisting of physical vapor deposition and chemical vapor deposition, wherein the inhibiting layer comprises a substance selected from a group consisting of a transition metal, a transition metal alloy, a nitride compound, a noble metal, and a noble metal alloy, wherein the transition metal alloy includes a platinum rhodium alloy, wherein the transition metal is selected from a group consisting of platinum, rhodium, and tungsten, wherein the nitride compound is selected from a group consisting of tungsten nitride and titanium nitride, wherein the noble metal is selected from a group consisting of platinum, gold, titanium, and silver, and wherein the noble metal alloy is selected from a group consisting of graphite, chlorimet 3, and hastelloy C;

forming a second insulation layer abutting the inhibiting layer and the ohmic contact; and

forming a metallization layer abutting a diffusion barrier, wherein the metallization layer comprises a representative metal, wherein the representative metal includes aluminum, and wherein forming the metallization layer includes;

forming the diffusion barrier abutting the first conductive layer, wherein forming the diffusion barrier includes exposing the inhibiting layer and the ohmic contact through the second insulation layer, wherein the diffusion barrier comprises a nitride compound, a carbide compound, a boride compound, a transition metal alloy, and a transition metal nitride compound alloy, wherein the nitride compound includes titanium nitride, wherein the transition metal alloy includes titanium tungsten, wherein the transition metal nitride

compound alloy includes titanium nitride tungsten.

86.(Original) The method of claim 85, wherein forming the inhibiting layer includes forming the inhibiting layer on the second conductive layer.

87.(Original) The method of claim 85, wherein forming the inhibiting layer includes embedding the inhibiting layer in the second conductive layer.